

Using Medicaid Datasets to Measure Tobacco Use: A Review

Tobacco use causes [480,000 premature deaths](#) each year, making it the leading cause of preventable death in the United States. Adults enrolled in Medicaid [smoke cigarettes at twice the rate](#) as those on private insurance. Given [increased rates of tobacco use](#) in the Medicaid population, State and Territorial Health Agencies (S/THAs) must be able to quantify tobacco users to inform prevention strategies and better tailored public health and Medicaid programs and policies.

In collaboration with CDC, ASTHO is leading an effort to explore how states can use Medicaid data to quantify tobacco use within this population, identify related best practices, and make recommendations for scaling. ASTHO reviewed Medicaid enrollment forms and held key informant interviews with S/THAs and Medicaid agencies. In general, most states rely on publicly available datasets such as CDC's [Behavioral Risk Factor Surveillance System](#) (BRFSS).

Tobacco Use Can Be Quantified Using Multiple State Data Sources

- State/territorial Medicaid agencies collect various information through their **eligibility and enrollment process** as it is often the first point of contact. Based on a scan of publicly available Medicaid eligibility forms, ASTHO found just five states currently collect tobacco use data during eligibility, including [Washington State](#). The Washington Health Benefit Exchange owns this data and uses it to determine premium rates for qualified health plans on the ACA marketplace.
- **Medicaid claims data** indicate when an individual receives tobacco cessation treatment. This data is generally collected in electronic health records, populated into [standard claims forms](#), and submitted by providers to Medicaid Managed Care Organizations (MCOs) or the contracted fiscal agent for reimbursement. All state Medicaid programs provide some form of tobacco cessation. However, prevalence estimates determined by claims data are often lower than BRFSS state survey estimates since they only include those who seek cessation.
- Some states/territories use **Medicaid Managed Care health screenings and other surveys** to determine tobacco use levels. Indiana Medicaid's Healthy Indiana Plan, the state's Medicaid expansion program, requires MCOs to conduct a [health needs screening](#) during the enrollment process for new members including 13 questions, one of which is "do you use tobacco or vape?"
- Tobacco use is also measurable by **S/THA surveillance data and surveys** including BRFSS, [Adult Tobacco Survey](#), and other state-specific surveys. For example, the California Health Interview Survey (CHIS), which surveys 20,000 adults annually, includes a question about tobacco use that can be stratified by insurance type; this includes the approximately 25-30% of those insured by Medicaid. CHIS shares data regularly with both Medicaid and public health agencies.

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State Datasets to Identify Tobacco Use		
Type of Dataset	Tobacco Use Prevalence Ratio	Usefulness
Medicaid Eligibility/ Enrollment	Tobacco users in Medicaid / total Medicaid population	<i>Pro:</i> Provides the most accurate prevalence estimate of tobacco use. <i>Con:</i> Few states currently use as it would require amending eligibility/enrollment forms.
Medicaid Claims	People in Medicaid with diagnoses for nicotine dependence or tobacco use / total Medicaid population	<i>Pro:</i> Most commonly collected, easily accessed. <i>Con:</i> May be limited to individuals who seek cessation treatment. Often does not match publicly available datasets like BRFSS.
MCO Screenings/ Surveys	Tobacco users in MCO / total MCO population	<i>Pro:</i> Allows S/THAs to better understand their managed care population. <i>Con:</i> Limited collaboration between S/THAs and managed care.
S/THA Surveys	Survey respondents indicating tobacco use / total respondents	<i>Pro:</i> S/THAs own the data. <i>Con:</i> Sample size used to estimate prevalence.

Challenges

As S/THAs and state Medicaid agencies serve different populations, they sometimes **have different priorities**. In addition, 32 states/territories have organizational structures with S/THAs and Medicaid in separate agencies. In key informant interviews, S/THAs who expressed a need for better collaboration have taken steps to make some of the practices started during the COVID-19 pandemic permanent. For example, multiple states/territories have formed cross-agency to better align priorities.

While some S/THAs and Medicaid agencies have formal data sharing agreements—including Memoranda of Understanding, Data Use Agreements, and Interagency Agreements—**there is limited data sharing and collaboration between MCOs and S/THAs**. Multiple states described MCO inclusion of tobacco use questions during enrollment, but the state Medicaid agency did not collect or have access to this data. S/THAs also express a **lack of understanding of Medicaid data sets and governance structures**. In some cases, this issue prevents strategically using data for analysis, program, and policy development despite strong relationships.

Recommendations

- *Ensure Medicaid programs collect tobacco use on eligibility forms.* [Washington State's eligibility form](#) frames its question so beneficiaries know their answer will not impact access to health coverage.
- *Ensure Medicaid programs have established data sharing agreements* with the S/THA specific to Medicaid eligibility data.
- Where Medicaid managed care is in place, *ensure S/THAs have established relationships with each MCO* and assess opportunities for data sharing. This includes sharing best practices from the COVID-19 pandemic that catalyzed partnerships and agreements between S/THAs and Medicaid agencies.

In Summary

State/territorial Medicaid agencies can improve data collection by adding a tobacco use question on eligibility forms to better understand the needs of their beneficiaries. With this information, Medicaid agencies can partner with S/THAs to analyze tobacco use comorbidities and cessation attempts. Further, this information could facilitate faster connections to tobacco use Quitlines and cessation services. To ensure data is current, Medicaid agencies can also collect tobacco use data during reenrollment.